



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/806,601

03/23/2004

Pradeep J. Iyer

6259P005

2458

8791

7590

06/11/2009

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER

RIYAMI, ABDULLA A

ART UNIT

PAPER NUMBER

2416

MAIL DATE

DELIVERY MODE

06/11/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 01/20/2009 have been fully considered but they are not persuasive. Applicants argue that Dietrich and Cameron, taken alone or in combination do not disclose (1) placing an address of the station into a list identifying stations located in a potential coverage hole if none of the plurality of access points computes a RSSI value of the management message above the second RSSI threshold; and (2) removing the address of the station from the list one of the plurality of access points computes the RSSI value of the management message above the first RSSI threshold.

Examiner respectfully disagrees with Applicant's characterization of the prior art. Dietrich discloses placing an address of the station into a list identifying stations located in a potential coverage hole if none of the plurality of access points computes a RSSI value of the management message above the second RSSI threshold (see column 4, lines 15-25, figure 1, block 24, the central control element determines coverage holes, and figure 4, coverage analysis module 80 and stats collector 84, column 10, lines 7-29, stats collector maintains a list for each mobile station identifier and their corresponding signal strengths below a threshold signal level). Notice in column 8, lines 5-10, lines 16-20, stats collector maintains a list of signal strengths, 802.11 chip for each vendor has a specific maximum RSSI value (RSSI Max), therefore RF energy level reported by a particular vendor will range 0 to RSSI-Max, and the RSSI can be used in determining the existence of coverage holes in a wireless network environment. Notice in column

Art Unit: 2416

10, lines 13-16, stats collector maintains the detected strengths values associated with each packet corresponding to remote client elements.

Dietrich discloses removing the address of the station from the list one of the plurality of access points computes the RSSI value of the management message above the first RSSI threshold (see figure 5a, when the same mobile is detected, then an updated signal strength is recorded and updated in the stats collector and if it is not below threshold, it is not considered as an impact to the coverage hole analysis). Notice in column 10, lines 55-65, the coverage analysis module detects signal strengths of mobile stations and determines that the average signal strengths is less than a **threshold level** (minimum coverage profile is violated as discussed in column 9, lines 64-66), coverage analysis module then issues a notification to increase transmit power of the associated access element, so the next the coverage module receives signal strengths of the mobile stations (according to the embodiment described in column 10, lines 7-29), the average signal strength would not be violating the **threshold of the minimum coverage profile**, meaning that it no longer impacts the embodiment where coverage analysis to each access element is based on percentage of mobile stations below a threshold signal strength level. In another view, notice in column 11, lines 4-15, the stats collector generates a **delimited list** based on the minimum coverage profile and compares it to a high profile user (which have indication on/off) to determine whether a notification should be issued. In another view, see column 10, lines 26-29, a separate process scans the list of mobile stations identifiers and deletes entries where no activity has been detected for a period of time, i.e. no signal strength is detected

Art Unit: 2416

(due to mobile station being in a hole, or turned off etc.) as to a threshold of the device designed by the manufacturer (column 8, lines 5-8), the mobile station gets deleted. In also another view, **deleting** the mobile station when there is inactivity is an obvious variation of Applicant's removing of the address to a greater threshold, both achieving the same result of detecting coverage holes in a list such as a stats collector (see column 10, line 10).

Cameron disclose setting a plurality of received signal strength indicator (RSSI) thresholds including a first RSSI threshold and a second RSSI threshold having a value lower than the first RSSI threshold (see column 2, line 60-65, column 3, lines 5-10, column 4, lines 27-45, the central server sets a plurality of thresholds indicating event zones). Notice in column 2, lines 60-65, Cameron teaches of measuring the strengths of the signals received from a plurality of access points and storing the measured values with identifying physical addresses and matching the stored values with signal strength thresholds of a table of **event zones delimited by signal strength**. The signal strength thresholds define the event zones. Notice in column 4, line 40-45, the central server retrieves data and correspondence tables between the signal level thresholds associated to each access point and the event zones. Notice in column 6, lines 49-54, the received signal level measurement of the access point being used is compared to **predetermined threshold values** stored in a dedicated table indicating event zones. Thus, different stations, access points are defined as belonging to different event zones by being compared to different predetermined threshold values.

Art Unit: 2416

1. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Cameron and Dietrich et al. are analogous art because they are from the same field of endeavor of transmitting and receiving management frames and measuring and recording their signal strengths. The motivation to combine being to have a coverage hole detection method of receiving and measuring signal strengths of mobile stations through access points, and comparing them with set thresholds then determining on or more events based on the comparison which increases the accuracy of the detection (see column 2, lines 60-65, Cameron).

/Aung S. Moe/

Supervisory Patent Examiner, Art Unit 2416